

**Community Rating System Progress Report
2006
Bay County, Florida
NFIP Number 120004**

INTRODUCTION

Bay County is prone to flood hazards associated with hurricanes, tropical storms, and rainfall with high intensity or duration. Due to historic development patterns, the County's population is largely clustered along the coast, meaning that, these hazards have the potential to seriously impact the safety of the general population and their property. The County has taken a number of measures to plan for such hazards, including participation in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS). The Bay County Hazard Mitigation Strategy was initially adopted by the Bay County Board of County Commissioners on November 18, 1999 and has served as the Floodplain Management Plan (herein after referred to as the Plan) since that time. Many of the smaller local municipalities also utilize Bay County's Hazard Mitigation Strategy for floodplain management and disaster response purposes. The Plan was revised and adopted in late 2005 to ensure compliance with the Disaster Mitigation Act 2000 and additional CRS planning requirements. Copies of the Bay County Hazard Mitigation Strategy are available at the Bay County Emergency Operations Center, the Bay County Development Services Department, and the public library.

PLAN OVERVIEW

The following elements are listed in Bay County's Hazard Mitigation Strategy. They provide cornerstones for floodplain management in a rapidly developing coastal community. Many of these projects were designed to reduce property damage either directly or indirectly.

- **Reducing property damage**

1) Road Paving in the Deer Point Lake Reservoir Area – This is an ongoing project through which seven miles of dirt roads were paved in 2006, for a total of 35 miles since the program began in 2002. The number of homes in this area has increased dramatically over the past several years, changing the rural nature of this area to a more densely built suburban character. Many of the homes were constructed along narrow dirt roads without the benefit of a plan for controlling stormwater runoff. To protect properties from flooding, the county is paving the dirt roads with open-grade asphalt which uses large aggregate to produce a mix that is strong enough to withstand traffic, but permeable enough to allow stormwater to infiltrate into the ground through the pavement. Since infiltration is the most effective means of controlling stormwater runoff as it reduces both the volume of runoff that is discharged to receiving waters, as well as the associated water quality and quantity impacts that runoff can cause (EPA-821-R-99-012, August 1999), the use of permeable pavements has been identified as a viable Best Management

Practice for road construction. Open grade asphalt has been shown to absorb up to 60% of the first inch of rain which, in combination with the County's repair and improvement of roadside swales and drainage along these newly paved roads, results in a substantial improvement to the management of stormwater in the affected area.

2) Panama City Parkway Outfall – This project was designed to improve the capacity of the existing drainage system, thereby reducing the risk of flooding in nearby residential areas. Construction is scheduled to be completed in 2007.

▪ **Protecting public assets**

1) Master plan for beach stormwater outfalls - The County is developing a master plan for the repair and modification of all beach outfalls to define drainage problems and determine solutions to the continual flooding in the area. The first stage of this project will repair the inlet boxes at the end of 18 beach culverts to prevent damage that occurs after each storm major storm event.

2) Bay County Emergency Operations Center Relocation – The Bay County EOC is housed in an old building located within the Category 3 Hurricane Surge Zone, rendering it unsafe in the event of an approaching Category 3 or higher storm. While relocation to a safer elevation has been planned, it has taken several years to assemble the funds necessary to accomplish the move. As of this upcoming fiscal year (2006/2007) sufficient funds are available to proceed with the relocation and the Bay County Board of Commissioners has recently approved the agreement to co-locate with Gulf Coast Community College outside the surge zones and floodplain.

3) 11th Street Stormwater Retention Project – 11th Street is an important evacuation route in Bay County. However, this roadway has been subject to flooding during heavy rainfall events. The County has secured funds from the Northwest Florida Water Management District to improve drainage from the roadway to ensure a safer evacuation route. This project is in the early stages. A boundary survey has been completed and wetlands have been delineated. The next phase, a feasibility study, will be completed in 2007.

4) Shell Island Land Acquisition – Shell Island is a Coastal Barrier Island (and a CoBRA Zone). The majority of the island is owned by Tyndall Air Force Base and the State of Florida, and is operated as a passive, resource-based park (St. Andrew State Park) by the Florida Department of Environmental Protection's Division of Recreation and Parks. Shell Island is a public asset that is a popular tourist destination and serves as a frontline of defense against tropical storms and hurricanes. The Bay County Board of Commissioners passed a resolution directing staff to work with state agencies to purchase the remaining privately owned lots on the island and incorporate them into the state park. Parallel to the fee simple acquisition efforts, the County adopted a Transfer of Development Rights (TDR) ordinance in 2005 which provides density and intensity bonuses as an incentive for Shell Island property owners to sever their development rights from their island properties to be utilized for additional development at off-island locations. In 2006 four lots were acquired using TDRs, and it is anticipated that the acquisition of lots will continue.

5) County road projects to correct flooding – The engineering department is currently working on several road projects which will correct drainage problems and alleviate flooding conditions on adjacent properties (Owen Wood Road, Surf Drive, Hurt Avenue, Coleridge Road, Davenport Road, Cato Road and HWY 390, Oak Forrest Drive, Coe Road and Scurlock Road).

6) Replacing two wooden bridges – Wooden bridges at Bear Creek and Blue Springs Road will be replaced in part due to hazardous flooding conditions during rain events and potential collapse.

▪ **Building safely and carefully in vulnerable areas**

1) Requirement for surveyor's benchmark check - The Bay County Builder Services Division reviews requests to construct new buildings in flood prone areas, and continually seeks ways to improve this review process. In 2004 and 2005 regulations were strengthened by issuing elevation certificates (ECs), and requiring a one-foot freeboard. In 2006 an additional precaution was added. Builder Services now requires a check of the surveyor's benchmark to ascertain the correct elevation prior to pouring the foundation.

2) Improving evacuation routes – To ensure timely and safe evacuation from the southern end of the County, the primary evacuation route, the Florida Department of Transportation is continuing with the process of four-laning Highway 79.

3) On a daily basis Bay County provides floodplain information to realtors, potential property buyers, lenders and property owners.

Encouraging responsible growth in coastal areas

1) Study of Stormwater issues in the entire County watershed system - Bay County is partnering with a local, non-profit group (the Bay Environmental Study Team or B.E.S.T.) to evaluate and consolidate the existing data for the entire watershed, and prioritize and develop a strategy which will recognize the importance of utilizing science-based knowledge in correcting problems related to stormwater runoff. B.E.S.T. has been awarded a \$500,000 grant from the Northwest Florida Water Management District for this purpose, and will work with County stormwater engineers and planners on this study. At the end of the study period, a series of projects will be recommended to mitigate flooding situations that are a result of improper drainage and stormwater runoff.

2) Coastline Stabilization Project - B.E.S.T. has also applied for a grant to construct an oyster shell reef/barrier in West Bay. The reef will attenuate wave action in order to protect and stimulate the expansion of a salt marsh behind it. The salt marsh will buffer the wave action from the adjacent 3,500 foot shoreline and protect it against further erosion. The concept is to have a healthy salt marsh in place prior to beginning home construction near the shore. This will allow B.E.S.T. scientists to study the benefits of salt marshes in reducing wave energy, thus mitigating the potential for flooding to coastal homes.

3) Expanded Public Outreach Program - With increasing growth comes the requirement for a higher level of public outreach. County staff is working with the University of Florida IFAS extension office to extend the stormwater drain marking program into public schools and other organizations. Current outreach programs have been tailored for each flood prone area, and the GIS department has designed a new brochure explaining flood zones and the CRS program.

YEAR END STATUS OF THE CRS PROGRAM

Although Bay County did not experience any significant storm events in the 2006 reporting period, not all of the additions to the Repetitive Loss Property Report (losses from Hurricane Ivan and Dennis) were included in last year's report. With those inclusions, the total repetitive loss properties (RLPs) have increased from 85 to 164. For CRS purposes, repetitive loss properties are defined as any property that the National Flood Insurance Program (NFIP) has paid two or more flood claims of \$1,000 or more in any given 10 year period. With the large amount of coastal development in Bay County, there is the potential for the community to experience heavy devastation should a storm make direct landfall. In light of this fact, and in consideration of the substantial increase in RLPs, the County will continue to strengthen measures to minimize the potential loss of life and property should there be such an occurrence. Specifically, the County will undertake a review of its building code and standards in vulnerable shoreline areas, expand and intensify its public outreach and education programs, partner with other organizations, and mitigate for potential flooding resulting from stormwater runoff.